

# Melanotan II

## Como Compounding Pharmacy

**Melanotan II: Tanning & Fat Loss Peptide**

**Purity:** 98% (HPLC on request)

**Molecular Formula :** C<sub>50</sub>H<sub>69</sub>N<sub>15</sub>O<sub>9</sub>

**Molecular Weight:** 1024.2

**CAS No.:**121062-08-6

**Sequence:** Ac-Nle-Asp-His-D-Phe-Arg-Trp-Lys-NH<sub>2</sub>(cyclic 2-7)



### Description

Melanotan and melanotan II are both analogs of the peptide hormone alpha-melanocyte stimulating hormone ( $\alpha$ -MSH) inducing skin tanning. Like its predecessor, Melanotan I, MT 2 plays a role in stimulating melanogenesis and thus providing a protective mechanism against UV rays since under its actions melanocytes are able to increase production and secretion of hormone melanin. Scientists were also able to notice another characteristic of this compound. MT 2 had a positive effect on libido due to its aphrodisiac properties. Scientists also found MT 2 had a mild positive fat-mobilizing effect.



### Protocol

**Content and Potency:** 5ml at 2000mcg/ml ready-to-inject subcutaneous.

**Suggested dosage:** 0.25ml daily for 1 - 2 weeks then 0.25mL twice weekly for maintenance.

**Transdermal Option:** 500mcg/mL x 40mL – Apply 1mL daily for 1 - 2 weeks then 1mL twice weekly for maintenance.



### Clinical Research

**Evaluation of melanotan-II, a superpotent cyclic melanotropic peptide in a pilot phase-I clinical study.**

Dorr RT, Lines R, Levine N, Brooks C, Xiang L, Hruby VJ, Hadley ME.

Source: College of Medicine, Pharmacology Department, University of Arizona, Tucson, USA.

**Abstract:** A pilot phase I study was conducted with a cyclic heptapeptide analog of alpha-melanocyte stimulating hormone (alpha-MSH). The lactam-bridged molecule, called Melanotan-II (MT-II), has the structure Ac-Nle<sup>4</sup>-Asp<sup>5</sup>-His<sup>6</sup>-D-Phe<sup>7</sup>-Arg<sup>8</sup>-Trp<sup>9</sup>-Lys<sup>10</sup> alpha-MSH<sub>4-10</sub>-NH<sub>2</sub> (MT-II) and has superpotent melanotropic activity in vitro. A single-blind, alternating day (saline or MT-II), placebo-controlled trial was conducted in 3 normal male volunteers at the starting dose of 0.01 mg/kg of MT-II. Subcutaneous injections of MT-II or saline were given daily (Monday-Friday) for 2 consecutive weeks. Two subjects were escalated by 0.005 mg/kg increments to 0.03 mg/kg and one to 0.025 mg/kg. The 0.03 mg/kg dose produced Grade II somnolence and fatigue in one of two subjects (WHO standards). Mild nausea, not requiring antiemetic treatment, was reported at most MT-II dose levels. A stretching and yawning complex appeared to correlate with the onset of spontaneous, penile erections which were intermittently experienced for 1-5 hours after MT-II dosing, depending on the MT-II dose. Two subjects had increased pigmentation in the face, upper body and buttock, as measured by quantitative reflectance and by visual perception 1 week after MT-II dosing ended. These results demonstrate that MT-II has tanning activity in humans given only 5 low doses every other day by subcutaneous injection. The recommended single MT-II dose for future Phase I studies is 0.025 mg/kg/day.

**Please contact us for more info. Also available from Como Compounding Pharmacy:** Trial - The efficacy of afamelanotide and narrowband UV-B phototherapy for repigmentation of vitiligo.